+1 (613) 413-0204 / mcosma@gmail.com

Mihai Cosma

DeFi, portfolio management, trading, coding
Strategy development, derivatives pricing, portfolio construction
True believer in DeFi's ability to re-design the financial system for the benefit of all
Twelve years managing Canada's foreign reserves ($70bln+ fixed income portfolio)

Blockchain

- Active DeFi Degen with first-hand experience of three rug-pulls
- Community contribution prize in Dark Forest Round 3 blockchain game (plugin and custom client development)

Technical

- Accepted PRs in eth-tester, ApeWorX, Reth, lodestar, PyGithub, TrueBlocks, and LeelaChessZero
- Actively benchmarking local LLMs for coding on a local 3090 at https://github.com/wakamex/human3090

TradFi

- Developed multi-strategy security selection, including neural networks and gradient boosted machines in 2017
- Co-author of "A Framework in Search of an Optimal Margining Policy for Official Institutions: The Canadian Experience", Nakashima, Cosma, Plong, March 2016

Work Experience

DeFi Strategist — December 2021 – April 2025

- Co-author of The Hyperdrive Protocol: An Automated Market Maker for Fixed and Variable Rates
- Wrote Python SDK and fuzzing framework for systematic trading bots on Hyperdrive (agent0)
- Designed and led incentive campaign for Hyperdrive rewards leading to record volume

Senior Portfolio Manager, Foreign Reserves Management, Bank of Canada — June 2021 – December 2021

- Co-head of $20 billion non-USD credit portfolio (SSA and EGB in EUR and GBP)

Policy Analyst, Foreign Debt and Asset Policy, Bank of Canada — January 2018 – June 2021

- Designed analytical framework for portfolio construction
- Create backtesting framework to question modelling assumptions
- Questioned coherence of analysis across different levels of granularity from security to portfolio level

Portfolio Manager, Foreign Reserves Management, Bank of Canada — June 2015 – December 2017

- Outperformed dynamic benchmark through discretionary credit allocation of €14 billion Euro SSA portfolio
- Built, maintained, and implemented quantitative models optimizing exposures at both trade and portfolio level
- Explored best execution methods in illiquid markets, for both active and passive positions

Trader Analyst, Foreign Reserves Management, Bank of Canada — August 2013 – June 2015

- Briefed senior management on all topics of interest related to developed fixed income market
- Analyzed new investment opportunities, leading to expansion of investment universe and counterparty lists

Research Assistant, Foreign Reserves Management, Bank of Canada — July 2009 – August 2013

- Coded cross currency swap pricer and interest rate simulation to estimate regulatory capital cost

Education

BA Economics, Carleton University — September 2004 – April 2009

- Concentration in Financial Economics
- Executive member of the Sprott Finance Students Association